PetroDB — Petrophysics Courses & Training

PetroDB-WEB is the WEB implementation of PetroDB-Vault, a fully flexible IP or Geolog evaluation command file linked to a 28,000 core plug petrophysical database, PetroDB.

IPPetroDB Integrated Petrophysics with PetroDB is the training course which explains and demonstrates this functionality using a variety of Reservoir Types and Reservoir Rock Types. The course serves as an introduction on how to do a thorough, modern petrophysical evaluation properly and also on how to use the upcoming PetroDB-WEB service.

Logs are interactively calibrated to rock-typed hard data to create a convincing and uniquely powerful formation evaluation tool. Calibration is performed via an 18 parameter diagnostic interactive plot which selects rock-typed equations and parameters. It can also be performed externally in Excel for ad-hoc calibrations increasing its flexibility to allow use exotic non-log data with logs, quantitatively.

PetroDB-WEB is being developed as a web based app.

PetroDB consists of over 28,000 rock-typed, routine core plugs, SCAL, formation pressures and well tests. These have been intelligently cross-referenced to basic geological information, conventional logs and modern special logs over 25 years of technical consulting and 60 detailed reservoir studies. The power of this petrophysical database is captured during petrophysical evaluation by it's interface with PPL's proprietary Hierarchical Evaluation Command File "The Vault". The Vault uses over 200 equations calibrated with Reservoir and Rock Type specific relationships extracted from PetroDB. In-out switchable modules use the PetroDB data which meet selection criteria to calibrate that well's available special logs including NMR, ADT, SSCAN and inverted log analysis equations to address each reservoir's specific issues.

Not a Black Box

This PetroDB-Vault, logs to hard data integration, is not a "black box push button" process run by a computer operator! It is expertly tailored to each reservoir via a **fully transparent**, **documented process** which can be challenged and modified at any point by a colleague, skeptical partner or adversary.

The PetroDB-Vault methodology provides an extremely flexible, convincing and **uniquely powerful formation evaluation tool** which may be applied to any well, reservoir or field, clastic, carbonate or fractured.

PetroDB-Vault results are definitive and cannot logically be overturned.

Why? Because they are the result of an agreed, **transparent**, hierarchical and hard calibrated process with each step open to interrogation and editable to the agreed consensus input.

PetroDB-WEB is not a "Black Box" like typical log analysis software products. All available data is used and the integration steps are fully transparent, documented and agreed. "What If" scenarios may be run at will. PetroDB-WEB is used routinely for all PETROPHYSICS Pty Ltd technical <u>petrophysics courses</u> & consulting projects.